630.7 1£6b no.730 cop.8



UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN AGRICULTURE UNIVERSITY OF ILLMORY OBER RY AT URBANA CHAMEAGN ACKICULTURE

CIRCULATING COPY
AGRICULTURE LIERARY

# Changes in Imports of Capital Goods – Sierra Leone, 1950 - 1965



The College of Agriculture has both a general and a special interest in Sierra Leone. In general, we are interested in the problems of developing nations that involve the theory and practices relating to economic and general development. The special interest is in our contract with the Agency for International Development to assist in establishing Njala University College, which is now in its fifth year of operation.

This particular publication, the second of a series, is expected to contribute to both interests by providing a benchmark study on which other analyses can be built and by providing descriptive materials immediately useful in our AID-supported institution-building program.

Dr. Due, the author of this publication, visited Sierra Leone in 1965 as part of a Hatch project on U.S. agricultural exports and economic development in Africa. At the time the study was made Mrs. Due was a visiting professor with the Department of Agricultural Economics.

# Changes in Imports of Capital Goods – Sierra Leone, 1950 - 1965

JEAN M. DUE

VISITING PROFESSOR OF AGRICULTURAL ECONOMICS

### CONTENTS

SETTING
Manufacturing
Development Planning
Gross National Product
Foreign Trade10
Price Level Changes13
Exports
IMPORTS OF CAPITAL GOODS14
Agricultural Machinery17
Other Agricultural Inputs20
Building and Construction Materials21
Mining and Industrial Machinery25
Imports of Public Works Equipment
(Including Those of Government Corporations)30
Trucks, Buses, and Rubber Materials33
Other Capital Goods Imports34
OPPORTUNITIES FOR IMPORT SUBSTITUTION35
SUMMARY38
APPENDIX A40
APPENDIX B

The author wishes to acknowledge the cooperation received from officials of Njala University College, from officials of the Agency for International Development, and from Sierra Leone government officials. Special thanks go to William N. Thompson, professor of farm management and policy, and Dunstan Spencer, Sierra Leone graduate student in agricultural economics, University of Illinois, for their assistance in reading the manuscript.

Urbana, Illinais May, 1968

THIS STUDY was designed to determine the relative importance of categories of capital goods imported into Sierra Leone since 1950, to compare the rate of change of capital goods¹ imports with rates of change of consumer goods imports and national incomes, and to explore possibilities for import substitution. A parallel study, Changes in Incomes and Imports of Consumer Goods in Sierra Leone, 1950–1963,² was completed in 1966; considerable descriptive material on the economy was included in it and need not be repeated here. At that time official national income estimates were not available; these have now been constructed annually, beginning with 1963.³

### SETTING

Sierra Leone, one of the small former British colonies on the west coast of Africa, gained its independence in 1961. From 1961 to 1967 Sierra Leone had a democratic government.<sup>4</sup> The country is in the early stages of economic development, with a per capita national income of \$134 in 1965. Seventy-seven percent of the population is engaged in agriculture, forestry, and fishing; most of the agriculture is of a subsistence nature. The traditional farming system in the uplands is one of bush-fallow rotation, with bush being cleared for farming once in five to ten years.

Rice is the staple food of Sierra Leone; both upland and swamp rice are grown. Domestic production has had to be supplemented by imports in recent years. The major agricultural exports are palm kernels and palm oil, cocoa, coffee, ginger, kola nuts, and piassava. Groundnuts,

¹ Capital goods in this study are defined as all nonconsumer goods; that is, all imports were arbitrarily classified as consumer or capital goods. For a list of trade classifications see Appendix A.

<sup>&</sup>lt;sup>2</sup> Due, Jean M., Changes in Incomes and Imports of Consumer Goods in Sierra Leone, Agricultural Experiment Station Bulletin No. 719, Urbana: University of Illinois, College of Agriculture, 1966, and a summary that appeared as Due, Jean M., "Trends in Consumption Goods Import in Sierra Leone, 1950–1963," The Nigerian Journal of Economic and Social Studies, Vol. 8, No. 2, July, 1966.

<sup>&</sup>lt;sup>8</sup> National Accounts of Sierra Leone, November, 1966, Central Statistics Office, Freetown: Government Printer of Sierra Leone, 1966.

For information on political developments since 1967, see Appendix B, p. 43.

tobacco, cassava, yams, maize, guinea corn, citrus fruits, pineapples, and bananas are grown also. Due to the presence of the tsetse fly, cattle are raised primarily in the north by the Fula tribe. Many cattle are walked long distances to market, with consequent loss of weight and quality.

# Manufacturing

Prior to independence there was little manufacturing in Sierra Leone, and most of the needs of the country were met by importation.<sup>5</sup> A steady growth in public and private industrial development has occurred over the years. Some examples of the public and semi-public industries are the government rice mills, now operated by the Rice Corporation; the Sierra Leone Produce Marketing Board (SLPMB), operating oil mills for the extraction of palm oil; and the Forest Industries Corporation, a sawmill and timber utilization industry at Kenema, producing furniture, prefabricated housing, lumber, and carved wooden products. The Road Transport Department operates vehicle repair shops, one of which also builds bus bodies. The railway repair shops have serviced private heavy equipment as well as railway equipment. A government printing plant does printing for public and semi-public bodies.

Most private or semi-private industries produce consumer goods for the domestic market. Some examples are a tuna cannery, a plant which freezes and distributes fish, a brewery, a distillery (70 percent government owned), a sawmill at Katema, and small factories producing soft drinks, mineral water, cigarettes, footwear, suitcases, knitted fabrics and undergarments, umbrellas, paint, furniture, oxygen acetylene and carbon dioxide, ice, matches, and metal beds and springs. Capital goods such as cement, nails, prefabricated housing, buckets, metal trunks, and metal doors and windows are being produced; galvanized and corrugated iron sheet production is under consideration. Tire retreading and diamond cutting operations have also been established. A palm kernel mill, making palm oil and palm kernel oil cake, began operation in 1967. Also there is small-scale production of tile, soap, and furniture, and there are village industries of cloth weaving and dyeing, fish curing and smoking, and boat- and basket-making.

<sup>&</sup>lt;sup>5</sup> A Progress Report on Economic and Social Development, April 27, 1961-March 31, 1965, Freetown: Government Printer of Sierra Leone, 1965, p. 53.





Locally manufactured products in high demand are cement and Seven-Up. (Fig. 1)

### **Development Planning**<sup>6</sup>

Development plans were drawn up and passed by the legislature as early as 1946. In 1962, a new ten-year plan for the period 1962–63 to 1971–72 was prepared by Dr. David Carney, a Sierra Leone economist, and adopted by Parliament. This plan was drawn up in a matter of months and encouraged many government departments to consider their long-term requirements and goals; needs of the country rather than methods of finance were emphasized. The public sector was to spend £99 million in capital costs and £53 million in recurrent development costs during the first five years of the period; this would require at least a fivefold increase from past levels of expenditure. The estimates of domestic financing (£15 million a year) and external aid (£14 million a year) have not been attained to date. Dr. Carney has since resigned to take a position with the U.N. African Institute for Economic Development and Planning in Dakar. A revised five-year plan has been drawn up for the 1965–1970 period.

Although the monetary unit of Sierra Leone became the leone in 1964, the West African pound  $(\pounds)$  is used throughout this report, as official data were so reported between 1950 and 1963. The value of the West African pound was and is equivalent to and at par with the British pound.

Development projects are under way, some examples of which are transportation and other surveys and feasibility studies (that are being carried out or that have been completed). A World Bank loan has been secured for electricity production in the Freetown area. The United Kingdom has financed the Guma Valley Water Project, which is piping water to Freetown. West Germany has loaned money for road construction, the United Kingdom for the development and extension of Lungi Airport, and a French contracting group for the extension of the dock facilities. The United States Agency for International Develop-

<sup>&</sup>lt;sup>6</sup> See also A Progress Report on Economic and Social Development, April 27, 1961-March 31, 1965, op. cit., and P. E. Beach, "The Host Country Side of Multilateral Investment Guarantees: A Critique of Foreign Investment in Sierra Leone and Several Proposals Regarding an Investment Guarantee Institute." Prepared for OECD.

<sup>&</sup>lt;sup>7</sup> An Outline of the Ten-Year Plan for the Development of Sierra Leone, Freetown: Government Printer of Sierra Leone, 1946; Hubert Childs, A Plan of Economic Development for Sierra Leone, Freetown: Government Printer of Sierra Leone, 1949; and D. T. Jack, Economic Survey of Sierra Leone, Freetown: Government Printer of Sierra Leone, 1958.

<sup>&</sup>lt;sup>8</sup> D. Carney, Ten-Year Plan of Economic and Social Development for Sierra Leone, 1962-1963 to 1971-1972, Freetown: Government Printer of Sierra Leone, 1962.

ment (AID) has assisted with the development and staffing of an agricultural and educational university, Njala University College, and with other projects: a Republic of China demonstration team has worked on vegetable and paddy rice cultivation; Philips of Holland has improved the telephone communications system; and a French engineering firm is providing treated water supplies to 21 provincial towns. Government, educational, commercial, and office buildings and a hotel have been built; another hotel has been completed but not opened; wharf facilities have been expanded; population and agricultural censuses have been completed; and roads have been built.

Table 1. — Estimated Gross National Product and Per Capita Gross National Product, Sierra Leone

Year	Gross national product			
	(£ millions)	(millions)	(pounds)	
1961	80-90	2.5	32-36a	
1961	60–90	2.2	27-416	
1961	112.0	2.5	44.2°	
1962	53.6	2.1	25.0d	
1963	78.2	2.2	35.7 <sup>d</sup>	
1963	97.8	2.2	44.4°	
1964		2.2	49.90	
1965		2.2	52.7°	
1965	122.8	2.3	53.6 <sup>f</sup>	

<sup>a</sup> Estimate by Dr. Chalak, United Nations.
<sup>b</sup> Derived by the staff of the International Bank for Reconstruction and Development in The Economy of Sierra Leone, 1964.
<sup>c</sup> Transportation Survey of Sierra Leone, March, 1963, Transportation Consultants, Inc.,

Washington, D.C., p. 17.

<sup>4</sup> Selected Economic Data for Less Developed Countries, Statistical and Reports Division,

AID, May, 1964.

\*National Accounts of Sierra Leone, June, 1967, Central Statistics Office, Freetown:
Government Printer of Sierra Leone, 1967, p. 7.

\*Statistical and Reports Division, AID, 1967.

### **Gross National Product**

There was a wide variation in estimates of Gross National Product (GNP) before the first official estimates were calculated.9 The official estimates are compared with the earlier ones in Table 1. The official estimate of £97.8 million for 1963 (shown between the broken lines in Table 1) was very close to the first two 1961 estimates (allowing for growth over a two-year period), but significantly higher than the AID

Due, Jean M., Bulletin 719, op. cit., p. 19.

estimates for 1962 and 1963. The estimates of Transportation Consultants, Incorporated appear to have been too high; however, it is not known whether these were estimates of GNP or GDP (Gross Domestic Product); they were termed "Gross Product." The official GDP estimates were £100.6, £113.1, and £120.2 million for 1963, 1964, and 1965, respectively.

The GNP of Sierra Leone increased 18.5 percent from 1963 to 1965. The consumer price index rose 16.6 percent in Freetown, the capital, (Table 4) during the same period. However, the price level increase for the whole country is estimated at 5 to 6 percent during this period. Hence per capita gross national product would have risen approximately 12 percent in real terms.

# Foreign Trade

The value of Sierra Leone's retained imports and domestic exports grew steadily from 1950 to 1965 at average annual rates of 12.1 and 10.2 percent, respectively. The diamond rush, starting in 1952 and reaching a peak in 1956–57, had a significant upward impact on incomes in Sierra Leone. Many people flocked from farming to diamond mining; the value of agricultural exports has never again attained the level reached in 1951. From 1954 to 1959 there was widespread smuggling of diamonds out of Sierra Leone, with estimates ranging from £8.5, to £14.5 million per year. Arrangements for licensing of African miners and for purchasing through the government's diamond buying office had become effective by 1960, and by 1962 diamond smuggling had been largely brought under control.

The visible trade balance between exports and imports was unfavorable during almost the entire period from 1950 to 1965 (Table 2). According to the Transportation Consultants: "some portion of these deficits may be explained by (externally financed) development expenditures, but it is reported by local sources that much of it (until 1962) is probably the result of illegal and unrecovered exports of diamonds." 12

Concern regarding the economic effects of large annual visible trade deficits diminishes when the estimated value of diamonds smuggled out of the country is shown (Table 2, last column). The estimated value of

<sup>&</sup>lt;sup>10</sup> For a good discussion of the impact of the diamond boom see H. L. Van der Laan, *The Sierra Leone Diamonds*, Oxford University Press, London: 1965. Van der Laan estimates 30,000 Sierra Leone diggers were at work in the diamond areas in 1954; some 45,000 foreigners were estimated to have left Sierra Leone in 1956 after the expulsion order (pp. 8, 20, 65).

<sup>&</sup>lt;sup>11</sup> See Table 2, Column 5.

<sup>12</sup> Transportation Survey of Sierra Leone, op. cit., p. 16.

Table 2. — Visible Balance of Trade, Sierra Leone, and Estimated Value of Diamond Smuggling, b 1950-1965

Year	Retained imports	Domestic exports	Visible trade balance	Estimated value of diamond smuggling
		(£ tho	usands)	
1950. 1951. 1952. 1953. 1954.	6,458 7,993 10,042 10,867 12,479	6,661 9,855 9,900 11,701 10,974	203 1,862 -142 834 -1,505	(c) (c) (e) (o) 10,000
1955 1956 1957 1958 1959	16,823 22,041 24,911 20,831 20,451	9,927 12,127 15,008 16,541 16,400	-6,896 $-9,914$ $-9,903$ $-4,290$ $-4,051$	12,000 14,500 9,500 11,000 8,500
1960. 1961. 1962. 1963. 1964.	22,639 28,333 26,561 26,436 32,348 35,857	25,927 25,162 16,643 25,445 30,441 28,769	3,288 -3,171 -9,918 -991 -1,907 -7,088	4,000 (c) (c) (c) (c) (c)
Average annual increase:	12.1%	10.2%	,	

 <sup>\*</sup> Quarterly Statistical Bulletin, Freetown: Government Printer of Sierra Leone, No. 3,
 September, 1964; No. 5, December, 1965; and 1964-65 Trade Report, Freetown, Government Printer of Sierra Leone.
 \* H. L. Van der Laan, op. cit., pp. 27 and 135.

e Not available.

smuggled diamonds for the years 1954 to 1960 exceeds the sum of the visible trade deficits from 1950 to 1965 by over £10 million. The value of these smuggled diamonds points out the inadequacy of the official export statistics in this situation.

The official import data also may not reflect the value of total imports retained in the country. In his budget speech for the financial year 1966-67, the Minister of Finance reported that, for the first three months in the financial year of 1965-66, customs receipts dropped materially below expectations. "This shortfall was due mainly to the closure of the border of neighboring territories, which provided flourishing re-export avenues to the trade of this country. Stocks of imports piled in the Customs shed. This led to a sharp fall in imports and, of course, in import duty."13

This statement indicates that a considerable volume of imports in Sierra Leone have been re-exported across the borders of neighboring countries.

<sup>18</sup> From a speech by the Hon. R. G. O. King, Minister of Finance, in the Sierra Leone Trade Journal, July-September, 1966, Vol. 6, No. 3, p. 82.

Table 3. — International Transactions of Sierra Leone, 1963, 1964, and 1965<sup>a</sup>

		1963	1964	1965
_			(£ million	)
2.	Export of goods and non-factor services: Merchandise, f.o.b. Other Factor income from the rest of the world	25.8 4.3 1.0	31.6 4.0 1.0	29.7 <sup>b</sup> 4.5 .8
٥.	3. Current transfers from the rest of the world	1.0	.8	.9
	(sum of items 1–3)	32.1	37.4	35.9
	Imports of goods and non-factor services: Merchandise, f.o.b	26.4 7.2	31.7 8.5	33.5 8.9
	world	3.8	4.3	5.1
	(sum of items 4–6)	38.2	45.3	48.4
	Surplus of the nation on current account  Net capital transfers received by:	(-)6.1	(-)7.9	(-)12.5
0,	Private	3.0 1.7	5.4 3.6	9.2° 1.7
9.	Increase (-) or decrease (+) in monetary reserves <sup>d</sup>	2.4	(-)1.2	1.3
10.	Net unrecorded items	(-)1.0	.1	.3

a Bank of Sierra Leone as reported in National Accounts of Sierra Leone, November, 1966, p. 12, and Bank of Sierra Leone, Balance of Payments, 1963-1965, pp. 1 and 2.
b The decrease of £1.9 million in exports between 1964 and 1965 is accounted for by a decrease of £1.4 million in diamonds and £0.5 million in agricultural products.
c The significant increase in private capital transfers of £3.8 million between 1964 and 1965 is in private, long-term capital "mainly of direct investments in branches, subsidiaries, etc., undistributed profits of subsidiaries or branches, the net acquisition of share and loan capital, by overseas companies. The estimates include the parent company's share of unremitted and undistributed profits of subsidiaries or branches, the net acquisition of share and loan capital, changes in branch/head office indebtedness, and changes in inter-company accounts." (Bank of Sierra Leone, Balance of Payments, op. cit., p. 13.)
d Provided by the International Monetary Fund (IMF), West African Currency Board, and other monetary institutions.

Diamond smuggling was reported to be under control by 1962. In 1960 the visible balance of trade was positive, but the balance turned negative again in 1961 and has remained negative since 1961. The 1962 trade deficit was aggravated by diamonds being withheld from the market pending price agreements. These diamonds were then exported in 1963. Capital inflows for development were £2.6, £1.2, and £2.3 million in 1961-62 to 1963-64, respectively:14 these could have accounted for most of the visible negative trade balance for 1961, 1963, and 1964, but not for 1962 or 1965 when the negative balance reached £9.9 and £7.1

<sup>&</sup>lt;sup>14</sup> Due, Jean M., Bulletin 719, op. cit., Table 4, p. 14, from A Progress Report on Economic and Social Development, April 27, 1961-March 31, 1965, op. cit., p. 84.

Table 4. — Consumer	Price Inde	x (C.P.I.).	Freetown,	1950-1965ª
---------------------	------------	-------------	-----------	------------

Year	C.P.I. (1961 =100)	Year	C.P.I. (1961 = 100)	Year	C.P.I. (1961 = 100)
1950	55.4	1955	86.6	1961	100.0
1951	74.1	1956	92.0	1962	99.1
1952	85.7	1957	97.4	1963	99.9
1953	84.8	1958	93.8	1964	111.4
1954	89.3	1959	93.8	1965	116.5
		1960			

<sup>&</sup>lt;sup>a</sup> Transportation Survey of Sierra Leone, op. cit., Table 8, (1950-1956); Quarterly Statistical Bulletin No. 3, September, 1964 (1957-1963); and Quarterly Statistical Bulletin No. 6, June, 1966 (1964-65). The index was revised in 1955 and 1961; for the manner in which the earlier indexes were tied into the 1961 index, see Bulletin 719, p. 60.

million, respectively. A reconciliation of international transactions has been made by the Bank of Sierra Leone for 1963 through 1965.<sup>15</sup> From this reconciliation statement it is apparent that the deficit on current account (item 7, Table 3) is offset by capital transfers from abroad by private and central government sources (item 8),<sup>16</sup> leaving a deficit met by a decrease in monetary reserves in 1963 and 1965, and an increase in 1964 (item 9).

It would appear, therefore, that the negative visible trade balance over this long period can be explained by many factors: the diamond smuggling until 1962, re-exports to neighboring countries (which are not included in the official estimates), capital inflows by private and government sources, and a decrease in monetary reserves.

# Price Level Changes

The price level, as reflected by the Consumer Price Index in Freetown, increased rapidly from 1950 to 1957, primarily due to the increased demand for food and other commodities resulting from the diamond boom. After 1957, with increased imports of food and other commodities, the index remained relatively stable until 1963. Since 1964 the price level has increased rapidly (Table 4).

# Exports

As noted above, agricultural exports began to decline when the diamond boom started and to date have never attained the 1951 level.<sup>17</sup>

<sup>&</sup>lt;sup>18</sup> Bank of Sierra Leone, Balance of Payments, 1963-1965, Freetown: Government Printer of Sierra Leone.

<sup>&</sup>lt;sup>16</sup> See footnote d, Table 3.

<sup>&</sup>quot;Gerald Sayler argues that the pricing policy of the SLPMB had greater influence on the decline in agricultural exports than the migration to the diamond areas. See R. G. Sayler, *The Economic System of Sierra Leone*, Durham, N.C.: Duke University Press, 1967, pp. 121-123.

Agricultural exports, which comprised 52 percent of total exports in 1950, fell to 16 percent in 1965 (Table 5). Diamonds, which accounted for only 25 percent in 1950, rose to 64 percent in 1965. Exports of iron ore were about 20 percent of the total throughout this period.

Table 5. — Major Domestic Exports of Sierra Leone for Selected Years<sup>a</sup>

	1950		1960		1965	
Exports	£		£		£	
	thousands	%	thousands	%	thousands	%
Diamonds	. 1,650	25	16,482	64	18,479	64
Iron ore		21	4,137	16	5,449	19
Chrome ore	. 94	1	147	1	0	0
Bauxite	. 0	0	0	0	289	1
Agricultural (total)	. 3,482	52	4,768	18	4,477	16
Palm kernels and oil	. 2,383	36	2,918	11	2,840	10
Cocoa beans	. 117	2	696	3	479	2
Coffee beans		1	628	2	674	2
Kola nuts		1	150	1	99	0
Piassava		4	273	1	219	1
Other (ginger and benniseed).		8	103	0	166	1
Total items listed		99	25,534	99	28,694	100
Total exports		100	25,927	100	28,769	100

<sup>&</sup>lt;sup>a</sup> Annual trade reports and *Quarterly Statistical Bulletins*, No. 3, September, 1964, and No. 7, September, 1966.

### IMPORTS OF CAPITAL GOODS

Data from Tables 2 and 6 and the earlier study indicate the following average annual growth rates in Sierra Leone from 1950 to 1965:18

Gross national product (1950–1961)	.9.9%
Domestic exports	10.2%
Retained imports	12.1%
Consumer goods imports	10.0%

What was the growth rate of capital goods imports during this period? To determine this, the annual trade data were reclassified to separate consumer and capital goods;<sup>19</sup> the latter was grouped in seven categories<sup>20</sup> to make it possible to discover trends in individual sectors as well as total capital goods imports (Table 7).

Capital goods imports increased at a faster rate (15.6 percent) than consumer goods (10.0 percent) or total imports (12.1 percent) from

<sup>18</sup> Due, Jean M., Bulletin 719, op. cit., p. 42.

<sup>20</sup> For details of items in each category see Appendix A. The grouping was done arbitrarily by the author based on her knowledge of the Sierra Leone

economy.

<sup>&</sup>lt;sup>19</sup> In 1954 the trade classifications were changed to follow the U.N. International Trade Classifications; hence, the categories previous to 1954 are not always identical with those from 1954 to 1964. In 1964 categories were again renumbered, and in the data available re-exports are not given for each category. Therefore, 1964 and 1965 data are less accurate than for earlier years.

Table 6. — Value and Rate of Growth of Certain Imports and Exports of Sierra Leone, 1950–1965<sup>a</sup>

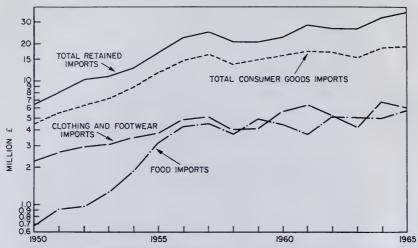
			Imports of						
Year	Domestic exports	Agricul- tural exports	All con- sumer goods <sup>b</sup>	Foodb	Cloth- ing and footwear	Alcoholic bever- ages	To- bacco		
			£)	thousands	s)				
1950 1951 1952 1953	6,661 9,855 9,900 11,701 10,974	3,482 6,577 6,110 5,760 6,360	4,518 5,515 6,380 7,090 8,857	667 904 977 1,249 1,854	2,290 2,662 2,930 3,053 3,456	242 369 597 664 805	362 358 397 432 491		
1955 1956 1957 1958	9,927 12,127 15,008 16,541 16,400	4,590 4,451 4,011 4,415 5,324	11,567 14,723 16,378 13,655 14,811	3,182 4,241 4,534 3,762 4,998	3,777 4,838 5,065 4,044 4,199	1,077 1,258 1,570 1,391 1,152	558 703 707 685 536		
1960 1961 1962 1963 1964	25,927 25,162 16,643 25,445 30,441 28,769	4,768 4,033 4,001 4,159 5,086 4,529	16,110 17,362 17,172 15,538 18,622 18,818	4,468 3,762 5,129 5,041 4,927 5,643	5,719 6,409 5,298 4,233 6,781 6,140	1,027 1,088 896 747 591 593	614 485 742 586 638 711		
Average an	nual incre	ase: 1.8%	10.0%	15.3%	6.8%	6.2%	4.6%		

Annual trade reports,
 These figures differ from comparable ones in Bulletin 719 as salt has been added and animal feeds subtracted from the human food totals. Capital goods are also corrected.

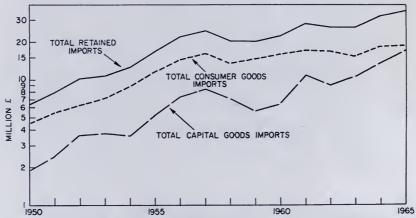
Table 7. — Value of Major Capital Goods Imports Retained in Sierra Leone, 1950–1965a

Year	Building and con- struction materials	Mining and in- dustrial ma- chinery	Public works equip- ment	Trucks and buses	Agricul- tural ma- chinery	Other agricul- tural inputs	Other	Totalb
				(£ the	ousands)			
1950	899 1,046 1,115	311 403 576 637 312	177 147 409 732 618	193 235 339 390 503	38 41 44 46 82	194 179 463 183 146	476 574 785 674 792	1,940 2,478 3,662 3,777 3,622
1955	2,055 3,062 2,851	447 906 1,484 745 731	834 947 899 1,569 986	639 1,370 1,243 968 1,024	132 199 165 129 133	153 190 169 222 160	1,553 1,651 1,511 692 495	5,257 7,318 8,533 7,176 5,640
1960. 1961. 1962. 1963. 1964.	3,027 2,870 3,201 3,615	1,153 2,117 2,566 2,442 4,179 4,191	987 1,842 937 1,612 1,788 1,797	1,017 1,928 1,293 1,220 1,971 2,499	113 167 163 136 275 511	261 384 314 420 335 395	538 1,506 1,246 1,858 1,563 3,661	6,529 10,971 9,389 10,898 13,726 17,039
Average annua	al increase:	18.9%	16.7%	18.6%	18.9%	4.9%	14.6%	15.6%

<sup>&</sup>lt;sup>a</sup> Annual trade reports. For details of items included in the different categories, see Appendix A. <sup>b</sup> See Table 6, footnote b.



Comparison of total imports retained in Sierra Leone, 1950-1965, with imports of consumer goods, clothing and footwear, and food. (Fig. 2)



Comparison of total imports retained in Sierra Leone, 1950-1965, with imports of consumer and capital goods. (Fig. 3)

1950 to 1965 (see Figures 2 and 3). The value of capital goods imports almost tripled between 1960 and 1965. Among capital goods, the greatest increase in rate of importation from 1950 to 1965 was for mining and industrial machinery and agricultural machinery (18.9 percent each), followed by trucks and buses (18.6 percent), public works equipment<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> Included are government imports for railway and road equipment, the SLPMB and other government corporations, and general central and local government operation. The public sector is, of course, quite important in most developing economies.

Table 8. — Percentage Share of Major Capital Goods Imports for Selected Years, Sierra Leone<sup>a</sup>

Components	1950	1955	1960	1965	Average (1950–1965)
Building and construction					
materials	28	28	38	23	30
Mining and industrial					
machinery	16	9	18	25	20
Public work equipment	9	16	15	11	14
Trucks and buses	10	12	15	15	14
Agricultural machinery	2	2	2	3	2
Other agricultural inputs	10	3	4	2	4
Other capital goods					
imports	25	30	8	21	16
Total	100	100	100	100	100
Value (& thousands)		5,257	6,529	17,039	7,372

a Table 7.

(16.7 percent), building and construction materials (14.1 percent), and other capital goods (14.6 percent). Other agricultural inputs showed the slowest rate of import increase (4.9 percent). Components of each of these categories will be examined later.

The largest share of capital goods imports (30 percent) consisted of those for the building and construction industry (Table 8). The second most important component was mining and industrial machinery; these imports, which vary considerably from year to year depending on the expansion plans of the mines, accounted for 20 percent of all capital goods imports over the period. Public works equipment and trucks and buses accounted for 14 percent each, while imports for agricultural uses accounted for only 6 percent. Other capital goods imports — machine tools, gasoline and lubricants, chemicals, and so forth — accounted for 16 percent of the total.

# **Agricultural Machinery**

Although 77 percent of the population of Sierra Leone is engaged in agriculture, most agriculture is of a subsistence nature, employing labor-intensive methods. As seen in Table 8, only 2 percent of the capital goods imports were agricultural machinery in the 1950 to 1965 period. This category includes axes and hatchets, machetes, other hand tools and parts, agricultural machinery and parts, some tractors and parts, and weighing and grinding (milling) machinery.<sup>22</sup>

Previous to 1954, tractors imported for use in agriculture were designated as agricultural machinery; since 1954 the use of tractors

<sup>&</sup>lt;sup>22</sup> It is assumed that weighing and grinding machinery are used primarily for agricultural purposes.

was not designated. Therefore the allocation of imports of tractors and parts between agricultural and nonagricultural uses was difficult. It has been observed by persons knowledgeable about Sierra Leone agriculture that almost all of the tractors employed in agriculture are used by the public sector — the SLPMB, Njala University College, the Rice Research Institute, and the rice plowing and planting schemes being examples. It is known also that the number of tractors employed in agriculture is very small, as confirmed by data in Table 9. Annual increases in numbers of wheel and crawler tractors from 1960 through 1962 were 11 and 19, respectively.

Table 9. — Number of Tractors and Harvester-Threshers
Used in Sierra Leone Agriculture<sup>a</sup>

	1949- 1952	1957– 1959	1960	1961	1962	1963	1964
Tractors: Crawlers. Wheel. Subtotal.	7	(p)	49	50	55	55	78
	4	(p)	50	60	74	(b)	23
	11	(p)	99	110	129	(b)	101
Garden	(b)	13	8	4	4	4	7
Total		(b)	107	114	133	(b)	108
Harvester-threshers		(b)	2	2	2	2	3

<sup>a</sup> United Nations, Food and Agricultural Organization (FAO) Production Yearbook,
 <sup>b</sup> Not available.

It was decided, therefore, to allocate all the small wheel and crawler tractors (not exceeding 40-brake horsepower) imported for *government use* to agriculture.<sup>23</sup> All of the large tractors and parts and tires and tubes imported for *government use* were allocated to public works equipment and supplies. All of the tractors imported for *private use* together with their parts and tires and tubes were allocated to mining and industrial machinery.

In 1964 the trade classifications were changed and all agricultural machinery, except for hand tools, is listed together and so designated; thus, tractors and parts are allocated between agricultural and other uses. It will be noted that there is a significant increase in the imports of agricultural machinery during 1964 and 1965; in 1964, 48 percent of the total imports were for government use, in 1965 only 6 percent were so designated. The 1964–65 Trade Report gives imports of agricultural machinery from 1961 forward; therefore, the data have been corrected.

<sup>23</sup> This was an arbitrary decision that seemed to be the best compromise.

In the 1964-65 Trade Report, grain milling machinery is not included in the tabulation, but food processing machinery and parts are included for the first time; the value of food processing machinery and their parts imported in these years was £8,000 and £5,000, respectively.

The values of agricultural machinery imports are shown in Table 10.

Table 10. — Value and Importance of Major Components of Agricultural Machinery Imports Retained in Sierra Leone, 1950–1965<sup>a</sup>

	Han		Agrico tura machin	1	Tracte and pa		Weighi and grind		Tot	al
Year	£ thou- sands	%	£ thou- sands	%	£ thou- sands	%	£ thou- sands	%	£ thou- sands	%
1950	33 37 25 31 52	87 90 57 68 64	5 2 3 7	13 5 7 15 23	0 2 16 8 6	0 5 36 17 7	0 0 0 0 5	0 0 0 0 0 6	38 41 44 46 82	100 100 100 100 100
1955. 1956. 1957. 1958. 1959.	96 157 105 87 112	73 79 64 68 84	17 23 30 16 13	13 12 18 12 10	12 11 13 14 2	9 5 8 11 2	7 8 17 12 6	5 4 10 9 4	132 199 165 129 133	100 100 100 100 100
1960	87 144 145 106 128 84	77 86 89 78 47 16	12 16 10 20 138 421	11 10 6 15 50 82	5 (b) (b) (b) (b) (b)	(b) (b) (b) (b) (b) (b)	9 7 8 10 9	8 4 5 7 3 2	113 167 163 136 275 511	100 100 100 100 100 100
Average:		60		32	• •	4		4		100

<sup>&</sup>lt;sup>a</sup> Annual trade reports. For details of items included, see Appendix A. <sup>b</sup> Included with agricultural machinery from 1961 forward.

Hand tools: From 1950 to 1965, 60 percent of all agricultural machinery imports were hand tools. An index of the value of hand tools compared to the value of all agricultural machinery might serve as a useful indicator of the degree of mechanization of agriculture in developing economies.

Agricultural machinery: The value of agricultural machinery (other than hand tools and tractors) imported has been very low during this 15-year period. Even with tractors included, agricultural machinery imports were only 36 percent of total agricultural machinery brought into Sierra Leone.

Tractors and their parts:<sup>24</sup> As mentioned earlier, hand tools are much more important in Sierra Leone agriculture than tractors. Only small tractors (less than 40 b.hp.) imported for government use were included with the agricultural machinery category. The value of imports of tractors for agricultural use averaged 4 percent of agricultural machinery imports during the period.

Weighing and grinding machinery: Imports in this subcategory were also low, averaging 4 percent of the total.

The value of agricultural machinery imports increased at an average annual rate of 18.9 percent from 1950 to 1965 as compared with 15.6 percent for total capital goods imports.

### Other Agricultural Inputs

Included in this category are imports of natural and manufactured fertilizers, disinfectants and insecticides, rope, twine, and sacks, and other imports for agricultural purposes (seeds and bulbs, animal feed, and animals imported for breeding purposes). The major components of this category are shown in Table 11; these imports have grown at an average annual rate of 4.9 percent since 1950.

Bags and sacks: Ropes, twine, cordage, and cables as well as bags and sacks are included in this category. Imports of this group are the most significant of all reported in Table 11, accounting for 77 percent of other agricultural inputs. For recent years (1959 to 1963) ropes, twine, cordage, and cables accounted for one-third of the bags and sacks total.

In 1964 the bags and sacks classification was changed from jute bags and sacks to bags and sacks of textile materials; also, the quantity of imports was reduced by almost 50 percent. It is not known whether or not polyethylene bags may be in a separate classification; they were not found in the trade reports.

Disinfectants and insecticides: These inputs have been reported separately since 1954 but have accounted for only 10 percent of this category.

Natural and manufactured fertilizers: Imports of *natural* fertilizers are reported separately in the trade reports, but imports were less than £1,000 annually. The value of total fertilizer imports is still low, accounting for only 3 percent of this category.

<sup>&</sup>lt;sup>24</sup> From 1950 to 1953, agricultural tractors were listed separately from other tractors; from 1954 on, tractors have not been designated by use. No attempt has been made to allocate imports of petroleum products between agricultural and nonagricultural uses. Petroleum products have all been included in other capital goods imports. Also trucks have not been included with agricultural machinery because of the difficulty of allocating these between agricultural, marketing, and other uses.

Table 11. — Value and Importance of Major Components of Other Agricultural Inputs Retained in Sierra Leone, 1950–1965\*

32	Bags sac		Disinfo tants a insectio	ind	Fertili	zers	Othe	er	Tot	al
Year	£ thou- sands		£ thou- sands	%	£ thou- sands	%	£ thou- sands	%	£ thou- sands	
1950	193	99	0	0	0	0	1	1	194	100
1951	177	98	0	0	1	1	1	1	179	100
1952	461	100	0	0	1	0	1	0	463	100
1953	181	99	0	0	2	1	0	0	183	100
1954	128	88	8	5	7	5	3	2	146	100
1955	133	87	11	7	4	3	5 3	3	153	100
1956	165	86	19	10	3	2	3	2 3	190	100
1957	139	82	23	14	1	1	6	3	169	100
1958	187	85	25	11	1	0	9	4	222	100
1959	114	71	27	17	3	2	16	10	160	100
1960	205	79	32	12	1	0	23	9	261	100
1961	295	77	48	12	15	4	26	7	384	100
1962	213	68	56	18	9	3	36	11	314	100
1963	248	59	43	10	46	11	83	20	420	100
1964	167	50	68	20	20	6	80	24	335	100
1965	192	49	73	19	18	4	112	28	395	100
Average:		77		10		3		10		100

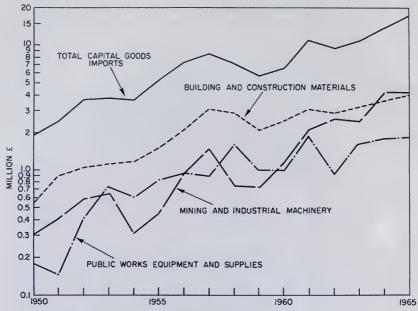
a Annual trade reports. For details of items included, see Appendix A.

Other: Other items included are seeds and bulbs, animal feed, and animals imported for breeding purposes. Imports of animal feed are included in the trade statistics with total food imports; these have been subtracted from the consumer goods section and included in Table 11. Imports of animal feed were minimal until 1960; they have increased from £19,000 in 1960 to £150,000 in 1964–65. In an effort to reduce animal feed imports the SLPMB stated it was constructing an animal feedstuff factory<sup>25</sup> at Moyamba as part of a palm kernel processing factory; the palm kernel cake will be used in animal feed. Imports of these inputs averaged 10 percent of total other agricultural inputs during the period.

# **Building and Construction Materials**

The value of imports for the building and construction industry has accounted for 30 percent of total capital goods imports during this period, being the most important category. These imports have in-

<sup>&</sup>lt;sup>26</sup> "SLPMB's Agricultural and Industrial Development Projects," Sierra Leone Trade Journal, October-December, 1966, Vol. 6, No. 4, p. 130. This feed mill had not been constructed as of this writing, but another palm kernel mill producing oil and kernel oil cake began operation in January, 1967.



Imports of total capital goods compared with imports of building and construction materials, mining and industrial machinery, and public works equipment and supplies, Sierra Leone, 1950–1965. (Fig. 4)

creased at an average annual rate of 14.1 percent from 1950 to 1965 (Table 7 and Figure 4). Included in this category are paints and turpentine; plywood and fiberboard; lime, cement, and bricks; hardware, nails, and finished structural steel; prefabricated buildings, insulated cables, air conditioning equipment, and lighting fixtures; and other materials used for building and construction. Each of these subcategories will be considered independently.

Structural iron and steel, copper, and aluminum: Thirty-four percent of building and construction imports are in this subcategory, which includes tubes and fittings; pipes and castings; corrugated iron, copper, and other wire; nickel and aluminum sheets; and nickel, lead, zinc, and tin alloys and other structural materials of iron, steel, copper, and aluminum.

The value of imports of this subcategory paralleled those of lime and cement until 1953 but has increased much more rapidly since that time (Table 12). For recent years (1959 to 1965) over one-half of these imports were galvanized corrugated sheets, imports of which average over £500,000 per year. The government has negotiated for these corrugated sheets to be produced in Sierra Leone, but materials for manufacture will still have to be imported.

Table 12. — Value and Importance of Major Components of Building and Construction Industry Imports Retained in Sierra Leone,  $1950-1965^a$ 

	Iron and steel	Hardware and windows	Lime, cement, and brick	Prefab housing and lighting	Paint and turpentine	Plywood	Other	Tota	_
Year	thou- %	thou- %	thou- %	thou- %	thou- %	thou- %	thou- %	thou-	%
1950					4 4	13 2	0 0	551	85
1952.					7 1	9 69	00	1,046	100
1953	219 26 440 38	324 29 173 15	257 23 241 20	195 17 151 13	57 5	43 4 34 3	0 0 73 6	1,115	88
1955. 1956. 1957. 1958.	675 45 734 36 1,180 40 831 29 738 35	245 16 437 21 557 19 645 23 379 18	267 18 358 17 467 16 574 20 467 22	80 5 217 11 454 15 361 13 232 11	105 7 124 6 152 5 148 5	73 73 72 83 72 83 4	84 6 112 6 94 3 220 8 65 3	1,499 2,055 2,962 2,851	88888
1960 1961 1962 1963 1964	891 36 1,008 33 1,033 36 994 31 1,280 36				149 6 202 7 162 6 167 5 177 5	109 4 127 4 95 3 158 5 301 8	220 7 159 5 130 4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2,460 3,027 3,201 3,615 3,615	888888
Average:					מו ומ	,	}		100

Annual trade reports. For details of items included, see Appendix A.

Hardware, nails, and finished structural steel: The second most important component, accounting for 21 percent of building and construction materials imports, is this subgroup, which consists of hardware; finished structural steel; steel door and window frames; other finished iron, steel, and aluminum parts; wire cable of steel and nonferrous metals; safes; wire netting; nails; bolts; nuts; and other metal hardware. The value of these imports has more than tripled between 1950 and 1965. Local manufacture of metal doors and windows began in August of 1966.

In recent years the value of nails, bolts, and nuts imported has been over £100,000 annually; Sierra Leone is now producing some of its own nails.

Lime, cement, and bricks: Imports of items in this subcategory accounted for 19 percent of building and construction material imports. Included are lime, cement, bricks, asbestos cement, asbestos sheets and pipe, building stones, grinding and polishing stones, industrial glass, and other manufactures of asbestos. As noted in Table 12, this category is an important component of building and construction industry imports.

From 1950 to 1953, imports of cement constituted 91 percent of total imports of this subcategory; from 1959 to 1963 the cement component amounted to 80 percent. Local cement production commenced in Sierra Leone in 1964, and imports dropped to 48 and 29 percent of this subcategory in 1964 and 1965 respectively. It would appear possible to increase local production materially with significant foreign exchange savings.

Prefabricated buildings, insulated cables, air conditioning equipment, and lighting fixtures: Over one-half the imports in this subgroup consist of insulated cables; the figure has more than doubled during the period. Imports of air conditioning equipment and parts, sinks, and prefabricated buildings are also included in this subgroup.

Imports of prefabricated buildings jumped from £3,000 in 1954 to £290,000 in 1957 and then dropped to £69,000 in 1959, remaining at that level until 1963; this category could not be found in the 1964–65 Trade Report. Prefabrication of buildings began in Sierra Leone in the early 1960's by the Woehrling Saw Mills (a private company) and the Forest Industries Corporation (formerly the Forest Industries Department, a government enterprise). The Woehrling Saw Milling Company is an example of a very successful private enterprise in Sierra Leone.

This subcategory accounted for 12 percent of building and construction material imports during the period.

Paint and turpentine: Over 90 percent of this subcategory is made up of imports of prepared paints and enamels; the value of paint and turpentine imports grew slowly until the period between 1954 and 1957 when they tripled; they then remained relatively stable until 1961, when they increased significantly. Imports of paints and turpentine have increased from 1 percent (1950) to 7 percent (1961) of total building and construction imports, averaging 5 percent (Table 12).

A paint plant began production in Sierra Leone in 1962. Presumably many components will continue to be imported.

Plywood and fiberboard: Also included in this subcategory are paperboard and building paper, cork, and synthetic plastic sheets. Since 1954 the most important imports within this group were plywood and fiberboard. Imports of this subcategory have grown from 2 percent (1950) to 10 percent (1965) of total construction material imports, averaging 5 percent. It should be possible to produce more of the plywood locally.

Other: This subcategory is made up primarily of raw lumber, wood in the round (poles), and sawn and hewn lumber (wholly or partly dressed). These imports have not been a significant part of the total building and construction industry imports, amounting to only 4 percent.

In summary, imports for the building and construction industry represent the largest component of capital goods imports, accounting for 30 percent over this period. Local production of paint, nails, tile, cement, prefabricated buildings, and metal doors and windows have already occurred, and negotiations are under way for production of galvanized corrugated sheets. However, many components of some of these finished goods will have to be imported. The greatest prospects for import substitution appear to be in cement, tile, cement blocks, bricks, and all phases of the lumber industry.

# Mining and Industrial Machinery

The principal minerals of Sierra Leone are iron ore, diamonds, chrome ore, and bauxite. Iron ore, discovered in the early 1930's, has contributed significantly to the expansion of the economy. The value of iron ore output has trebled between 1950 and 1960, while exports of other minerals, such as chrome ore and gold, have tapered off since 1953.<sup>26</sup> The diamond boom, starting around 1952, increased diamond exports tenfold. Bauxite production started in 1963 and rutile (a titanium-bearing mineral) in 1966.

<sup>26</sup> Annual trade reports.







In labor intensive diamond mining operations, the gravel is excavated (top), put through foot shakers for sizing (middle), and washed (left) so that the diamonds can be picked out by hand. (Fig. 5) The major components of mining and industrial machinery imports are shown in Table 13. The imports have varied from year to year with the needs of the iron, diamond, and other private industries. 1952 and 1953 were years of heavy imports, as were 1956 and 1957 and each year from 1960 to date. The value of industrial machinery imports has accounted for 20 percent of total capital goods imports during this period; the average annual rate of growth was 18.9 percent from 1950 to 1965 (Table 7 and Figure 3).

Industrial machinery: The main components of this subgroup are bulldozers and other excavating machinery; hoisting machinery; graders, levelers, and scrapers; boring machinery; pumps; industrial trucks; road construction machinery<sup>27</sup> and parts; woodworking and textile machinery; printing and bookbinding machinery; machine tools; industrial sewing machines; and pneumatic tools primarily for the *private* sector of the economy.

Imports of this type of machinery depend upon the decisions of the mining companies from year to year, accounting for from 55 to 94 percent of total mining and industrial machinery imports from 1950 to 1965, averaging 75 percent (Table 13). For recent years (1959 through 1963) the value of parts imported for industrial machinery accounted for 38 percent of this subcategory.<sup>28</sup>

Tractors and parts: Imports of all tractors and parts, tractor tires and tubes for *private use* from 1953 to 1963 have been allocated to the mining and industrial machinery category. (See agricultural machinery, page 17, for additional data.) Since 1963, tractor imports are designated by use in the trade reports; those used in industry are included with industrial machinery. The value of these imports has varied from 1 (1950) to 12 (1960) percent of total mining and industrial imports, averaging 5 percent over the period.

Railway construction materials: This subcategory includes rails and other railway construction materials that were purchased by the *private* sector of the economy. Imports of these items, primarily for use by the mining company railroad, fluctuated significantly from year to year, 1962, 1963, and 1964 being years of heavy imports. During 1962 and 1963 railway construction materials accounted for 14 and 16 percent of total mining and industrial machinery imports but amounted to only 6 percent for the entire period.

<sup>&</sup>lt;sup>27</sup> Tractors and parts are listed separately because of their allocation between agricultural, public works, and mining uses.

<sup>&</sup>lt;sup>28</sup> Due to the changed classifications in 1964-65, it was difficult to get comparable data on parts imports.

Table 13. — Value and Importance of Major Components of Mining and Industrial Machinery Imports Retained in Sierra Leone,  $1950-1965^a$ 

	Indus	trial nery	Trac and p	tors	Railw construe mater	ray ction ials	Railway rolling stock	vay ng sk	Diesel other en	and	Other	er	Tota	
r ear	thou- %	%	thou- %	%	thou- %	%	£ thou- sands	%	thou- %	%	£ thou- sands	%	£ thou- sands	%
1950. 1951	232	75	82		0 41	04	13	44	10	00	63	20 16	311	100
1952. 1953. 1954.	421 479 171	73	27 8 28	0.10	118 57 52	3 9 17	34 25 23	047	0000	310	76 65 29	51 9 9	576 637 312	0001
1955 1956 1957 1958 1959	291 698 960 520 565	65 77 64 70	23 74 143 67 68	5 8 10 9 10	17 7 39 28 0	41840	57 59 294 71	13 6 20 9 5	18 24 23 18	48082	41 44 43 36 43	00000	447 906 1,484 745 731	100 100 100 100 100 100
1960. 1961. 1962. 1964. 1964.	940 1,780 1,786 1,817 2,567 3,956	81 84 70 74 61 94	142 233 237 143 (b)	33°°°112	2 1 350 387 317 4	0 14 16 0 0	21 31 33 672 42	100 110 110 110 110 110 110 110 110 110	6 1113 6 549 115	10 0 13 8	45 45 74 74	400000	1,153 2,117 2,566 2,442 4,179 4,191	000000000000000000000000000000000000000
Average:		75		rv		9		9		4		4		100

a Annual trade reports. For details of items included, see Appendix A. b Included with industrial machinery from 1964 on.





Two of the highly mechanized iron-ore mining operations are dredging (top) and movement of the ore on a conveyor belt (bottom). (Fig. 6)

Railway rolling stock: This subcategory includes railway locomotives, freight cars, and other railway rolling stock and their parts for the *private* sector of the economy. The most significant years for imports in this category were 1957 and 1964; this subcategory accounted for 6 percent of total imports of mining and industrial machinery.

Stationary diesel and other engines: Imports of these engines, used by the *private* sector of the economy, varied significantly from year to year, 1962, 1964, and 1965 being years of high imports. The value of stationary diesel and other engines amounted to only 4 percent of total mining and industrial machinery imports over the period.

Other: From 1950 to 1953 this subcategory consisted primarily of buckets, pails, basins, and explosives. From 1954 on, the primary components have been blasting explosives, fuses and detonators, and portable lamps. Explosives accounted for 2 percent and all other items for 2 percent of mining and industrial machinery imports over the period.

In summary, opportunities for import substitution for items within this category appear few unless some small items like buckets, pails, and basins could be made locally. Arrangements were made with the Sierra Leone Metal Works, Ltd. for production of buckets, metal trunks, and water heaters;<sup>29</sup> production began in September of 1967.

# Imports of Public Works Equipment (Including Those of Government Corporations)

There are several important government corporations in Sierra Leone that, together with the government, are responsible for imports in this category. Examples are the SLPMB, which purchases agricultural products for export, operates the oil mills for the extraction of palm oil, and operates oil palm and rubber plantations; the Forest Industries Corporation,<sup>30</sup> which produces furniture, prefabricated housing, lumber, and carved wooden products; and the Rice Corporation,<sup>31</sup> which mills, imports, and distributes rice. The railways, airlines, and electricity and water purification plants also are examples of public or semi-public bodies.

The value of imports of public works equipment and supplies grew materially from 1950 to 1965 (Table 14), at an average annual rate of 16.7 percent (Table 7 and Figure 5). Public works equipment constituted 14 percent of total capital goods imports. Opportunities for import substitution among these imports do not appear promising at this time.

<sup>&</sup>lt;sup>29</sup> Sierra Leone Trade Journal, July-September, 1966, Vol. 6, No. 3, p. 81.

<sup>30</sup> Formerly the Forest Industries Division.

<sup>&</sup>lt;sup>31</sup> Formerly the Rice Department.

Table 14. — Value and Importance of Major Components of Public Works Equipment and Supplies Imports Retained in Sierra Leone, 1950–1965

Year	Electric generating equipment	c ng int	Railway	y ves	Railway construction equipment	ry tion ent	Coal, co and avia fuel	oke, tion	Aircraft and diesel engines and parts	off esel es irts	Barges, ships, and boats	s, nd	Other	L.	Tota	
	thou-	%	thou-	%	£ thou- sands	8	thou- %	8	£ thou- sands	%	thou- %	%	thou-	%	thou-	%
1950		55		ro r	2 4	~	32	18	00	00	27	15	10	9 2	177	88
1952. 1953. 1954.	53 238 79	13	39 101	10 16	57 178 222	14 24 36	197 209 119	48 19 19	0008	004	23 23 16	322	32 33 53 53	000	409 732 618	888
1955. 1956. 1957. 1958.	135 212 270 270 430 220	16 22 30 27 22	164 256 27 160 1307 285 285	20 27 18 20 29	119 85 106 330 193	14 9 112 20	207 157 137 178 90	25 17 15 11 9	138 164 133 161 118	16 17 10 10	24 6 20 89 8	16213	47 67 73 74	01881	834 947 899 1,569	88888
1960. 1961. 1963. 1964. 1965.	455 524 450 1,251 1,373	46 28 48 77 77	78 572 7 28 50 60	332138	104 56 0 0 56 56	000000	55 138 98 69 119	0 10 4 7 11	140 239 309 130 127 146	113 88 7 8	35 192 6 6 44 44 5	400170	120 121 77 110 19	12 8 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	987 1,842 947 1,612 1,788	888888
Average:		45	1	13		6		12		11		4		9		100

\* Annual trade reports. For details of items included, see Appendix A.

Electric generating equipment and supplies: This subcategory includes electric motors, electric generating sets, telegraphy equipment, electrical appliances for motor vehicles, electrical energy measurement equipment, electrical equipment for motor vehicles and medical use, and other electrical machinery and parts thereof. These imports constituted the largest segment of public works equipment imports (45 percent).<sup>32</sup> Most important among these imports were parts of electric generators and motors and other electrical machinery and appliances, n.e.s.<sup>33</sup>

Railway locomotives: The second most important subcategory, making up 13 percent of total public works imports, was railway locomotives and parts purchased for government use; these varied greatly from year to year, reaching a high in 1961 when they accounted for 31 percent of total public works equipment imports.

Railway construction equipment: The value of imports of railway construction materials and rails also fluctuated markedly from year to year, averaging 9 percent of total imports of public works equipment during the period.

Coal, coke, and aviation fuel: The value of imports of coal, coke, and aviation and turbine fuel for *government* use (shown in Table 14) increased rapidly until 1958 and then declined, presumably as diesel oil replaced coal and coke for railway and electric generating use. (Diesel oil imports are included with other capital goods in Table 16.) This subcategory accounted for 12 percent of total imports of public works equipment and supplies.

Aircraft and diesel engines and their parts: Imports of aircraft, marine, diesel, steam, and other engines and their parts made up 11 percent of public works imports from 1950 to 1965. The highest imports occurred in 1961 and 1962.

Barges, ships, and boats: These imports by the government of Sierra Leone accounted for 4 percent of total public works equipment imports.

Other: Miscellaneous items such as ammunition, explosives, optical instruments, road construction machinery, large tractors, tires, tubes, and parts, purchased by the *public* sector are included in this category; these accounted for 6 percent of total public works imports.

Trucks and buses have been placed in a separate category although many may have been purchased for government use.

<sup>&</sup>lt;sup>32</sup> A small percentage of these imports were for the private sector.
<sup>33</sup> Not elsewhere specified.

Table 15. — Value and Importance of Trucks, Buses, and Rubber Materials
Imports Retained in Sierra Leone, 1950–1965<sup>a</sup>

	Trucks an buses	Rubber materials		Total		
Year	£ thousands	%	£ thousands	%	£ thousands	%
1950	145	75	48	25	193	100
1951	148	63	87	37	235	100
1952	284	84	55	16	339	100
1953	294	75	96	25	390	100
1954	442	88	61	12	503	100
1955	567	89	72	11	639	100
1956	1,217	89	153	11	1,370	100
1957	1,107	89	136	11	1,243	100
1958		84	153	16	968	100
1959	854	83	170	17	1,024	100
1960	804	79	213	21	1,017	100
1961		88	238	12	1,928	100
1962		85	197	15	1,293	100
1963		80	242	20	1,220	100
1964		83	333	17	1,971	100
1965		84	389	16	2,499	100
Average:		84		16		100

a Annual trade reports. For details of items included, see Appendix A.

# Trucks, Buses, and Rubber Materials

Passenger cars, trucks, and buses are utilized by both the private and governmental sectors of the economy. All passenger cars were included as private consumer goods in the earlier study; here tractors have been allocated between agricultural machinery, mining and industrial machinery, and public works (see page 18).

The value of truck, bus, and rubber materials imports retained in Sierra Leone is shown in Table 15; these imports accounted for 14 percent of capital goods imports from 1950 to 1965 and have increased at an annual average rate of 18.6 percent.

**Trucks and buses:** This subcategory includes dual-purpose vehicles, coaches and buses, trucks and lorries and their parts, chassis, and other road vehicles. These imports constituted 84 percent of truck, bus, and rubber materials imports.

Rubber materials: Tires and tubes for trucks, buses, and lorries; solid tires; rubber fabricated materials; and other manufactures of rubber accounted for 16 percent of total truck, bus, and rubber material imports from 1950 to 1965. Since 1959, 74 percent of these imports have been tires and tubes for trucks and buses.

### **Other Capital Goods Imports**

Machine tools, empty oil drums and other metal containers, printing and book binding machinery, portable electric tools, gasoline and lubricants, chemicals, and barges and ships (for the private sector) are some of the items imported under this category. Imports of these items accounted for 16 percent of total capital goods imports during the period and increased at 14.6 percent per year.

Gasoline and lubricants: Motor and diesel spirits (gasoline), furnace and fuel oil, lubricating oil, pitch, asphalt, petroleum, resin, coke, and natural and manufactured gas are included in this subcategory, while aviation gasolines are included in the public works sector. The value of gasolines and lubricant imports accounted for 29 percent of other capital goods imports.

Imports of gasolines and lubricants were negative for 1958, 1959, 1960, and 1962; for those years the value of re-exports was greater than the value of imports. Gasoline and lubricants are normally re-exported at a higher price than that at which they are imported; therefore, in some years the quantity retained in Sierra Leone is positive whereas the value is negative. In all but one year the number of gallons re-exported was less than the number imported. Many ships refuel at Freetown, an important port on the West African coast.

Machine tools: This subcategory includes machine tools of all kinds, portable electric tools and their parts, printing and bookbinding machinery, empty oil drums and other metal containers, and other manufactures of metal. From 1959 on, 45 percent of the imports of this subcategory were manufactures of metal, n.e.s.<sup>34</sup> In 1964–65, machine tools for metal work and printing and bookbinding machinery are included with mining and industrial machinery and portable electric tools with electrical machinery imports in public works equipment. These imports reduced other capital goods imports by approximately £250,000 over 1960 and 1962. In earlier years they were very low.

During the period under review, this subcategory accounted for 17 percent of other capital goods imports.

Chemicals: This subsection includes all chemical imports except those already included under insecticides and fertilizers (other agricultural imports) and turpentine (building and construction materials). Included are organic and inorganic chemicals, mineral tar, food chemicals, coal tar dyestuffs, and dying and panning extracts.

The value of chemical imports accounted for 6 percent of other capital goods imports during this period.

<sup>&</sup>lt;sup>34</sup> Not elsewhere specified.

Other: This subsection includes imports of barges and ships for private use, animal and vegetable fats and oils, and other miscellaneous imports including typewriters and their parts, photographic plates, and platewares. As can be noted in Table 16, this subcategory is an important sector of other capital goods imports, accounting for 48 percent.

There was a large increase in the imports of vegetable oils in 1965 over 1964. These imports were primarily peanut, soybean, cottonseed, and palm oils. (Prior to 1964 and 1965 the vegetable oils were not allocated by type.) It is surprising that Sierra Leone is having to import large quantities of palm and peanut oils when these could be produced locally. The increase in value of these imports between 1964 and 1965 was £400,000.

Table 16. — Value and Importance of Other Major Capital Goods Imports Retained in Sierra Leone, 1950–1965a

Year	Gasoline and lubri- cants		Machine tools		Chemicals		Others		Total	
	£ thou- sands	%	£ thou- sands	%	£ thou- sands	%	£ thou- sands	%	£ thou- sands	%
1950 1951 1952 1953 1954	205 253 388 353 301	43 44 49 52 38	57 57 67 65 174	12 10 9 10 22	28 27 57 57 57 35	6 5 7 8 4	186 237 273 199 282	39 41 35 30 36	476 574 785 674 792	100 100 100 100 100
1955	480 498 765 - 208 - 195	31 30 51 -30 -39	385 353 342 221 200	25 21 23 32 40	48 60 65 65 85	3 4 4 10 17	640 740 339 614 405	41 45 22 88 82	1,553 1,651 1,511 692 495	100 100 100 100
1960 1961 1962 1963 1964	-522 287 -117 796 977 1,421	-97 19 -10 43 62 39	216 248 413 338 135 126	40 17 35 18 9 3	62 111 102 136 119 130	12 7 8 7 8 4	782 860 848 588 332 1,984	145 57 67 32 21 54	538 1,506 1,246 1,858 1,563 3,661	100 100 100 100 100
Average:		29		17		6		48		100

a Annual trade reports. For details of items included, see Appendix A.

# OPPORTUNITIES FOR IMPORT SUBSTITUTION

Opportunities for import substitution of capital goods in Sierra Leone are more limited than those for consumer goods at this stage of economic development because of the size of capital investment required and the scale of output necessary to obtain efficient production of most large capital goods.<sup>35, 36</sup> W. Arthur Lewis has established the following general guidelines for determining commodities that developing economies could produce:<sup>37</sup>

"Industrialization starts usually in one of three ways: (1) With the processing for export of primary products (agricultural or mineral) which were previously exported in a crude state; or (2) With manufacturing for an expanding home market; or (3) With the manufacture for export of light manufactures, often based on imported raw materials.

"The processing of primary products for export depends on low labor cost and an advantage in transport cost, i.e. (if the material loses weight in the course of processing), e.g. timber and palm kernels."

Sierra Leone has encouraged flour and rice milling and the processing of palm kernels and coffee (instant and regular). However, the Pioneer Oil Mills, palm oil extractors, have not to date been operated at anywhere near capacity. Sayler<sup>38</sup> points out that "the SLPMB constructed nine of these mills, and only one of them, at Masarki, has ever operated at a profit; total losses on their operation until 1963 amounted to over £646,000. The Board (SLPMB) has repeated in many of its annual reports that the mills are unprofitable as a result of uneconomical

- (a) Enamelware factory...........Wellington Metal Manufacturing Co., Ltd.
- (b) Fruit and food processing......Mark-Mitch Inc. of New York, involving share capital of Le840,000.
- (c) Match factory......Assad Yazbeck & Sons, Ltd.
- (e) Metal beds and springs factory..Sierra Leone Metal Beds and Springs Factory, Ltd.
- (f) Perfumes ...... Sierra Leone Cosmetics Co., Ltd.
- (g) Fish products factory.........Fish Industries, Ltd., to process and can
- (h) Confectionery factory......J. Milhem and Sons, Ltd.

<sup>&</sup>lt;sup>35</sup> For suggestions regarding consumer goods import substitution possibilities see *Bulletin 719*, op. cit., pp. 42-43. Since this study was published, the *Sierra Leone Trade Journal* (July-September, 1966, Vol. 6, No. 3, p. 81) reports the following new consumer goods industries were established by the following firms:

<sup>&</sup>lt;sup>36</sup> While this statement is certainly true for goods like tractors and railway locomotives, it may be challenged for a substantial number of capital goods. W. Arthur Lewis argues in "Aspects of Economic Growth" (Nigerian Opinion, Vol. 2, No. 12, December, 1966, pp. 137-139) that Nigeria should further encourage small scale manufacturing (those firms employing 10 or less persons); Lewis argues that educational resources should be increased to train managerial talent in these industries.

<sup>&</sup>lt;sup>37</sup> W. Arthur Lewis, *Industrialization and the Gold Coast*, Accra: Government Printing Department, Gold Coast, 1953, pp. 1-2.

<sup>&</sup>lt;sup>38</sup> R. G. Sayler, op. cit., pp. 120-121.

operation due to insufficient supplies of fruit and the short working season; too high operating and overhead costs and heavy depreciation charges for mill equipment; the price paid to producers is also too high in relation to the value of the products (palm oil and kernels) for these mills to pay their way."

Thus skilled management is a basic need if the processing of primary products for export is to be advantageous.

Manufacture for the home market where fuel has to be imported is summarized by Lewis as follows:<sup>39</sup>

#### "1. Local manufacture is favored in two cases:

- "(a) If the industry uses a heavy raw material which is available on the spot, local manufacture is protected against imports to the extent of the cost of transporting the raw material, e.g. cement and beer.
- "(b) If the manufactured commodity is more bulky than the materials of which it is made, there is a similar protection, whether or not the materials themselves have to be imported, e.g. furniture, most assembly work, and hollow ware.

### "2. Local manufacture is at a disadvantage in two cases:

- "(a) If the raw material would have to be imported and loses weight in the process of manufacture, the transport factor favors production in the country that has the raw material, e.g. steel.
- "(b) If the fuel requirements are large. In most industries fuel cost is less than 2 percent of the value of the finished article, but in some industries it is as high as 15 to 20 percent. The cost of transporting fuel is eliminated when commodities are made where the fuel is to be found, e.g. steel, some chemicals.

# "3. Transport cost has little relevance:

- "(a) If the raw material has to to be imported but does not lose weight or acquire bulk in the process of manufacture. For transport cost is then more or less the same whether the country imports the raw material or the finished article, e.g. cotton weaving, cigarettes, and soap.
- "(b) If the fuel requirements are small, say only 2 percent of the cost of the finished article.
- "4. The size of the local market in relation to the minimum size at which production can be done economically."

Local production of paint, cement, prefabricated housing, nails, tile, oxygen acetylene, carbon dioxide, buckets, metal trunks, water heaters, and metal doors and windows has already occurred since independence, and tire retreading and diamond cutting firms are in operation. Also

W. Arthur Lewis, op. cit., pp. 1-2.

the government has negotiated for firms to manufacture galvanized and corrugated iron sheets. During 1966 further arrangements were made for:40

- "(a) National Oil Refinery: Through the assistance of the Haifa Refineries. Ltd., the government has raised a loan of Le2.9 million (from the Nissho Company, Ltd., of Japan) to establish a national oil refinery in Sierra Leone. The loan would be repaid from the profits of the refinery. The Haifa Industries, Ltd., will meet down payments for machinery and equipment and also engineering fees and working capital. The loan will be at 7 percent rate of interest.
  - "(b) Coffee Factory in Kenema operated by the SLPMB."41

Officials of Barclays Bank report<sup>42</sup> that the "Tennessee (Sierra Leone) Ltd., a company which had made an agreement with the government empowering the company to prospect for oil over offshore and coastal areas, has now abandoned its operations. The company initiated a marine seismic survey, but the results which were analyzed proved extremely discouraging. The company came to the conclusion that the offshore areas of Sierra Leone had no oil possibilities and exploration was therefore abandoned. The company has surrendered its exploration rights."

What other goods could be produced economically in Sierra Leone, thus creating employment and conserving foreign exchange?

Given the level of income, scale of operation necessary for efficient operation, labor skills available, and market potential,48 the possibilities at this stage of development beyond those already outlined (pages 36-38) would be bricks and other building materials (including greater quantities of cement, cement blocks, tile, and lumber products), bags and sacks, and animal feed. Within the lumber products group, plywood and prefabricated houses would seem especially important.

#### SUMMARY

This study was designed to determine the relative importance of different categories of capital goods imported into Sierra Leone since

<sup>&</sup>lt;sup>40</sup> From a speech by the Hon. R. G. O. King, Minister of Finance, in the Sierra Leone Trade Journal, op. cit., p. 81. Other development projects included the extension to the provinces of the Transistor Hire Purchase Scheme by the provision of 12,000 sets at a total cost of Le415,700 and an extension of the Port of Freetown.

<sup>&</sup>lt;sup>41</sup> Announced by the SLPMB in Sierra Leone Trade Journal, July-September,

<sup>1966,</sup> Vol. 6, No. 3, p. 110.
<sup>42</sup> Sierra Leone, an Economic Survey, Barclays Bank D.C.O., London: 1966, p. 21.

<sup>&</sup>lt;sup>48</sup> The simplified assumption is made that imports of capital goods are equal to the quantity demanded, since there was little local production of these goods. This assumption is not true for locally produced goods.

1950 and to compare the changes in capital goods imports with changes in consumer goods imports and incomes. It was hoped, also, that opportunities for import substitution would be apparent.

It was found that capital goods imports have grown at a slightly higher rate (15.6 percent per year) than consumer goods imports (10.0 percent) or the best available estimate of GNP for the period (9.9 percent). Other economic indicators and categories of capital goods have increased from 1950 to 1965 at the following average annual rates:

Total retained imports12.1%
Total domestic exports10.2%
Total capital goods imports
Mining and industrial machinery18.9%
Agricultural machinery
Trucks and buses
Public works equipment16.7%
Building and construction materials14.1%
Other agricultural inputs4.9%
Other capital goods14.6%

Of the capital goods imports retained in Sierra Leone from 1950 to 1965, 30 percent were building and construction materials, 20 percent mining and industrial machinery, 14 percent equipment and supplies for the public sector, 14 percent trucks and buses, and 16 percent for other miscellaneous items. Although 77 percent of the population is engaged in agriculture, only 2 percent of capital goods imports were for agricultural machinery<sup>44</sup> (including hand tools), and 4 percent for other agricultural inputs including fertilizer, insecticides, bags and sacks, and so forth. Sixty percent of all agricultural machinery imports were hand tools!

Opportunities for import substitution depend on many factors, among which are the size of the market, the level of income, local resources and labor skills, and the size of operation needed for efficient production relative to market potential. Local production of paint, cement, prefabricated housing and other lumber products, nails, tile, oxygen acetylene and carbon dioxide, buckets, metal trunks, water heaters, metal doors and windows, and the further processing of palm kernels, coffee, rice, flour, and animal feed has occurred in Sierra Leone since independence in 1961. A tire retreading plant and a diamond cutting industry have commenced operation. Capital expenditures have been made in office, educational, and public buildings, in two hotels, and

<sup>&</sup>quot;It should be noted, however, that some imports for agricultural uses are included in the public works section.

in a new university. Negotiations have been completed to establish an oil refinery, build a coffee factory, and to manufacture galvanized, corrugated sheets. Further possibilities at this stage of development include bricks and other building materials (including greater production of cement, cement blocks, tile, and lumber products), bags and sacks, and animal feeds. Among lumber products, increased production of plywood and prefabricated houses would be useful. Exotic mahogany and other plywoods also might be produced for the export market. Decisions as to which commodities are produced should be based on a cost-benefit analysis.

#### APPENDIX A

### Capital Goods Classification Categories From Annual Trade Report Data:a

#### 1. Agricultural machinery:

1950-1953:		
146, 147, 14	18, 149, 153, 1	54, 200, 201, 210, 215
1954-1963:		1964–1965:
629-014	713-011	629–140
-018	-012	-180
699-122	-013	695-110
-123	-014	-120
-129	-019	-190
712-xx1	716-132	712-001
-xx9	-133	-009
		719-630

### 2. Other agricultural inputs:

1950-1953:					
78, 80, 98, 99	9, 099, 100, 10	01, 0101, 250,	306		
1954-1963:			1964-1965:		
271-010	561-011	599-021	001-410	561-100	599-210
-020	-019	-029	271-000	-190	-290
-040	-021	655-061	292-000	-210	655-610
292-xx1	-029	656-011	-100	-290	-690
-xx9	-030	-019		-300	656-100
	-090	921-090		-900	

# 3. Building and construction materials:

1950-1953: 77, 82, 83, 145, 165, 166, 168, 169, 170, 171, 172, 173, 178, 179, 180, 181, 182, 243, 246, 257, 262, 284, 285, 286, 302 1954-1963: 681-040 683 - xx0699-011 24x-000661 - 010716 - 121-019-050684-xx1512-050 -020-129-060-020533-019 -xx1-xx2721 - 130-030-071-xx9-030811-010 -xx2599-010 -xx3-072685 - xx0-040812-049 631-030 -xx9-079 686 - xx0-050-xx0687-xx0 662 - xx0-120-060-xx0633-xx0 663-xx1 -130689-xx0 -070-xx9641-040 -110-140-050664 - xx0-xx0-180665-092 682 - xx1-060-xx9

<sup>&</sup>lt;sup>a</sup> The classifications were changed in 1954 to meet U.N. trade classifications; these were changed again in 1964.

1964-1965:					
24x-000	661-100	673-100	682-100	693-100	723-100
244-000	-200	-200	-200	-200	-200
251-000	-300	-900	683-000	-300	725-060
273-000	-800	674-100	684-100	-400	812-100
533-190	662-000	-200	-200	694-100	-200
-300	663-100	-300	685-000	-200	-300
581-000	-200	-700	686-000	698-100	-409
631-000	-900	-840	687-000	-200	
632-000	664-300	-890	689-000	-300	
633-000	-800	675-000	691-100	-400	
641-600	-900	677-000	-190	-900	
642-900	672-000	678-000	-210	719-121	
		679-000	-290	-129	
		681-200	-900		

 Mining and industrial machinery: Most of these were for the private sector but where a "p" is shown, only the private imports are used. 1950-1953;

156, 158, 163, 167, 174°, 175°, 176°, 190, 191°, 192°, 193, 194, 200°, 201°, 232, 233

233			
1954-1963:			
182-043	716-010	716-050	
591-012	-020	-080	
-020	-031	-111	
681-080p	-032	-136	
-110p	-033	-139	
711-053	-034	-140	
-056	-035	-150	
	-036	731-xx2 <sup>p</sup>	
	-037	-xx3 <sup>p</sup>	
	-038	-xx5p	
	-039	-xx9p	
	-040		
1964-1965:			
571-110	717-110	719-110	731-100p
-190	-190	-200	-200p
-200	-210	-301	-300p
676-100P	-290	-309	-500p
-200p	718-100	-310	-600p
711-100p	-210	-320	-700p
-200p	-290	-520	812-402
-300p	-410	-590	-403
-500	-421	-620	
-600	-422	-660p	
-900	-428	-700	
715-100	-429	-800	
-200	-500	-900	

5. Public works equipment and supplies: Most of these were for the public sector, but where a "g" is shown, only imports for government use are totaled.

144, 155, 157¢, 174¢, 175¢, 176¢, 188, 190¢, 191¢, 192¢, 193¢, 194¢, 200¢, 201¢, 210¢, 215¢, 218¢, 227, 236, 255, 256¢, 274, 276¢ 1954–1963:

311-xx0 <sup>e</sup>	711-041	721-011	731-xx1 <sup>g</sup>
313-011	-042	-013	−xx2¤
-023	-051	-014	-xx3g
591-011	-052	-015	-xx5g
-019	-054	-019	-xx9g
681-080¤	-055	-050	734-010
-110 <sup>g</sup>	-059	-060	-xx0
	-xx1	-070	735-091
	-xx2	-080	-099≈
	716-038¤	-110	861-010
	−131 <sup>st</sup>	-191	
	-135 <sup>g</sup>	-199	

1964-1965:					
332-000	711-100	722-110	729-120	731-100g	735-310
-110	-200	-120	-300	-200g	-390
-230	-300	-130	-400	$-300^{g}$	-920g
571-110	-410	-140	-500	$-500^{g}$	-930g
676-100	-420	-190	-600	-600g	-990g
-200	$-900^{g}$	-200	-920	$-700^{g}$	861-100
	713-012g	724-991	-940	734-100	
	$-014^{g}$	-999	-990	-900	
	-019	726-100			
	719-660	-200			

### 6. Trucks, buses, and rubber materials:

```
1950-1953:
  195, 196, 197, 206, 207, 209, 214, 290
1954-1963:
  621-010
               732-015
                             732-051
  629-013
                  -031
                                -052
     -017
                  -032
                                -059
     -019
                  -033
                                 -060
     -090
                  -034
                             733-090
1964-1965:
  621-000
               732-150
                             733-300
     -130
                   -200
                                -400
     -140
                   -300
  629-170
                  -400
     -180
                  -500
     -190
                  -600
     -900
                  -700
                  -800
```

#### 7. Other capital goods:

1950-1953:

73, 76, 79, 81, 85, 150, 157, 161, 162, 183, 186, 218, 219, 247, 248, 249, 251, 256, 275, 276, 277, 279, 280, 281

1954-1963: 313-019 314-xx0716-070 -022411 - xx0721-122 -032412-xx0 -129-039413-xx0 735-091 -041699 - 121-099-042-211-219-043-299-059-091715-010 -099-020

Section 5: all of groups 511, 512, 521, 531, 532 (except turpentine) and all other capital goods.

1964-1965: 331-000 332-540 411-000 -610332-190 421-400 -220-900-690-310-910422 - 200-390-990-900-400341-000 431-000 -510-100-530

Section 5: all of groups 512, 51x, 521, 531, 532 (except turpentine) and all other capital goods.

#### APPENDIX B

In 1967, in the second elections since independence, the opposition party (All Peoples' Congress) won 32 seats, the party in power (Sierra Leone Peoples' Party) won 22 plus 6 unopposed seats, and the Independents won 6 seats. Eleven Paramount Chiefs were elected and one returned unopposed (the Dove-Edwin Commission of Inquiry stated that all unopposed seats were illegal). Within ten minutes of the swearing in of the new Prime Minister, Army Brigadier Lansana declared martial law in Sierra Leone on the grounds that the Governor-General had acted unconstitutionally in appointing a prime minister before all the results of chiefs' elections were known. Within 48 hours younger army officers took over from Brigadier Lansana to avoid civil war, believing that the older army group was trying to impose the former prime minister on the state. The official government statement is as follows: "On the 23rd of March, 1967, the Army in cooperation with the Police took over the administration of this country and the National Reformation Council was formed."2

Col. A. T. Juxton-Smith, Chairman of the National Reformation Council, has stated: "We immediately realized that the economy was in a serious plight. . . . The difficulties were, in the main, due to the attempts of the last government to accelerate the economic development of Sierra Leone. . . . These attempts outstripped the resources available to finance them. Consequently, Government turned to other sources to finance its budget deficits, such as borrowing from banks and the use of accumulated cash balances. This, in turn, led to rising domestic prices and a substantial loss of foreign exchange reserves. Official foreign exchange reserves fell from 29 million leones in 1964 to about 16 million leones at the end of 1965."

An additional coup arose in May, 1968 as this publication was being prepared. Results were still uncertain as the publication went to press.

<sup>&</sup>lt;sup>1</sup> Report of the Dove-Edwin Commission of Inquiry into the Conduct of the 1967 General Elections in Sierra Leone and the Government Statement Thereon, Freetown, Government Printer of Sierra Leone, 1967.

<sup>&</sup>lt;sup>2</sup> Statement on the Budget for 1967-68, Freetown: Government Printer of Sierra Leone, June 30, 1967, p. 1.

<sup>&</sup>lt;sup>2</sup> Ibid.







UNIVERSITY OF ILLINOIS-URBANA 0.630.7IL6B BULLETIN. URBANA 730 1968

3 0112 019530838